19-AH-0001

(SIGNED ORIGINAL)

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

**ORDER NO. 00-047**

**WASTE DISCHARGE REQUIREMENTS**
**for**
**CITY OF WHITTIER**
**(SAVAGE CANYON LANDFILL)**
**(File No. 63-082)**

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

1. The Savage Canyon Landfill is a 132-acre, nonhazardous municipal solid waste management facility located at 13919 East Penn Street in the City of Whittier, California (Figure 1), that has been in operation since 1935. The landfill is owned and operated by the City of Whittier (hereafter "discharger"), under waste discharge requirements (Order No. 89-102) adopted by this Regional Board on September 25, 1989, and modified by the Subtitle D Superorder 93-062 on September 27, 1993.

2. The City completed a Master Land Use Plan for this waste management facility in 1969; it was subsequently revised in 1975, and then updated in 1997.

3. The 1977 "Savage Canyon Landfill Expansion Environmental Impact Report" (EIR) evaluated the potential environmental impacts from the landfill for a 1977 expansion. The Update of the "Final EIR: Savage Canyon Sanitary Landfill Expansion" (October 1985), evaluated the potential environmental impact of further expansion. Both of these environmental documents were certified by the City as the lead agency for the California Environmental Quality Act (CEQA).

4. Current permitted landfill operations at the waste management facility encompass approximately 132 acres, of which approximately 60 acres are occupied by the older, unlined portion of the site. The older portion of the landfill has reached capacity, and the City has laterally expanded the disposal area into an adjacent 42 acre parcel located in the back canyon area of Savage Canyon.

5. The landfill was operated as an open burn dump from 1935 until 1949. It is currently operated as a modified "cut and cover landfill" (sanitary landfill). Soil is excavated from onsite native soils to provide daily, interim and final covers. Periodically, alternative daily cover is used at this waste management facility. The

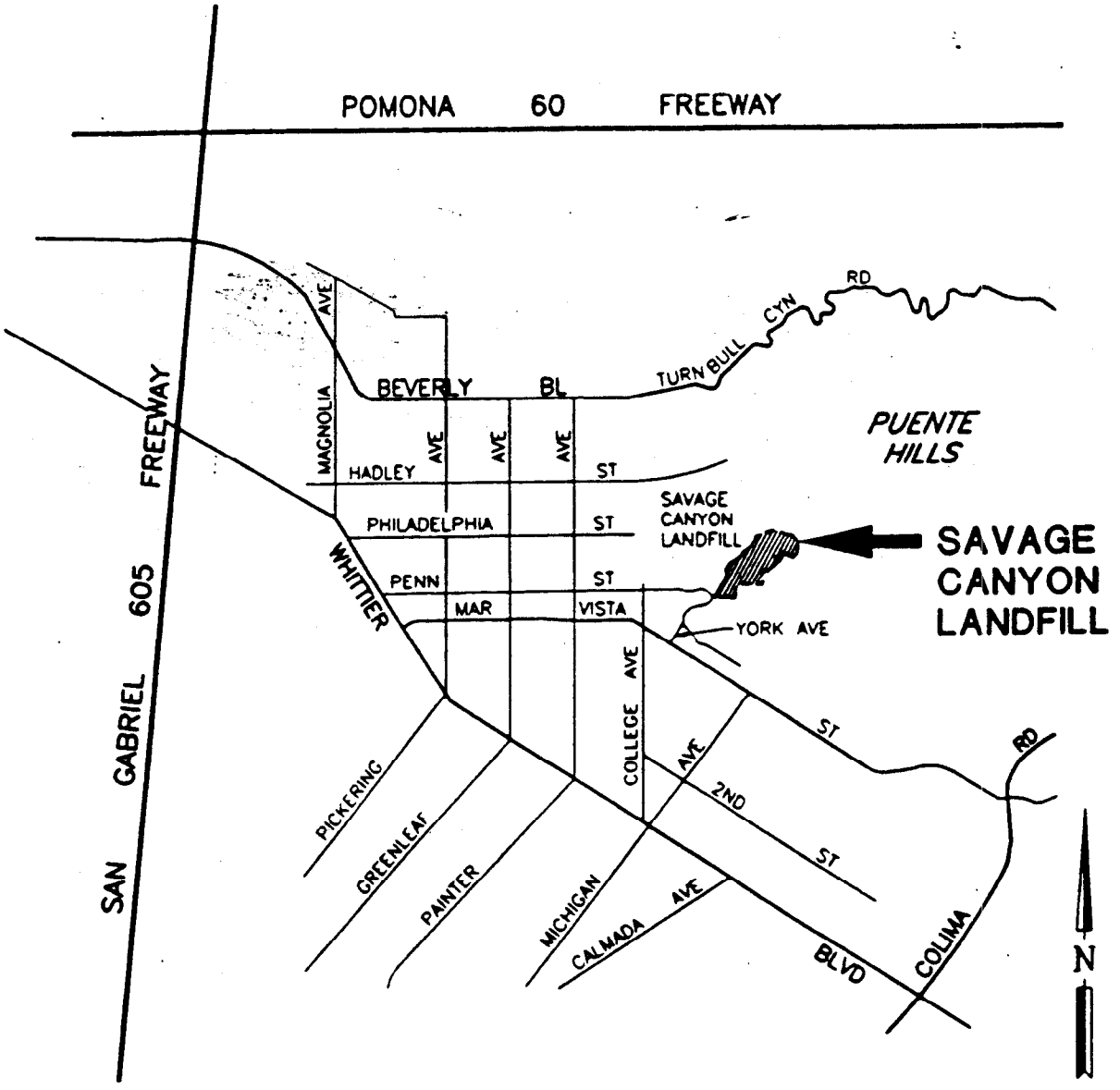


**FIGURE 1. LOCATION MAP FOR THE SAVAGE CANYON LANDFILL**
(NOT TO SCALE)

Source: BAS Engineers

landfill accepts up to 350 tons of nonhazardous solid waste each day. The estimated closure date for this waste management facility is 2048.

6. The Savage Canyon Landfill is located in the National Flood Insurance Community No. 0601690002B, and is classified as Zone C, designating the absence of a flood hazard .

7. Land uses surrounding the waste management facility include residential areas and a community park located to the south; residential properties and Whittier College are located to the west; oil field properties are located to the north; and light residential and open space are located to the east.

8. All permanent storm drainage facilities on the landfill are designed to handle flows from a 100-year, 24-hour duration storm in accordance with Section 20365 of Title 27.

9. A periodic waste load checking program is being implemented as part of the current landfill operation. The load checking program is designed to detect and prevent the disposal of unauthorized and hazardous materials.

10. The engineered containment features of the expanded landfill include a HDPE-clay composite base liner system installed beyond the footprint of the older, unlined portion, a geocomposite/HDPE liner system installed on the sideslopes, a leachate collection and removal system (LCRS) installed in all areas beyond the existing waste footprint, ground water and vadose zone monitoring systems, and a landfill gas collection system. These systems will be constructed to the prescriptive standards of Title 27 or equivalent performance standards. This Order specifies that final design and construction methods for proposed engineered systems be reviewed and approved by this Regional Board's Executive Officer prior to installation and that no disposal occur in a new area until the corresponding construction is completed and certified.

11. There are no known active faults onsite or within 200 feet of the waste management facility. Active faults are defined as Holocene Epoch faults that have exhibited surface movement in the last 11,000 years. The nearest known active fault, a segment of the Whittier Fault Zone, is located three miles to the east. Minor local faulting relative to folding is present onsite, but is not considered active for the purposes of engineering design.

12. Landfill slopes will be designed and constructed in a manner that will accommodate settlement and remain stable during the design earthquake event in accordance with Section 20370 of Title 27.

13. The waste management facility is underlain by thin alluvium deposits in canyon drainages, and by sedimentary rocks (sandstones, siltstones and conglomerates) of the middle Miocene Puente Formation and the Pliocene Fernando Formation. Landslide debris is present, and will be removed prior to liner construction and filling operations.

14. The waste management facility does not overlie any designated goundwater basin (Department of Water Resources 1961). However, surface waters, perched groundwaters, and semi-perched canyon waters, when present, are tributary to the Los Angeles Central Groundwater Basin.

15. The Regional Board adopted a revised Water Quality Control Plan (Plan) for the Los Angeles Region on June 13, 1994. The Plan contains water quality objectives and beneficial uses for groundwater of the Los Angeles Central Groundwater Basin. Beneficial uses include municipal, domestic and agricultural supply, and industrial service and process supply. The requirements in the Order, as they are met, will be in conformance with the goals of the Plan.

This Regional Board has notified the discharger and interested agencies and persons of its intent to adopt waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

This Regional Board in a public meeting heard and considered all comments pertaining to the discharge and to the tentative requirements.

**IT IS HEREBY ORDERED,** that the City of Whittier (discharger), shall comply with the following at the Savage Canyon Landfill:

## A. Acceptable Materials

1. The Savage Canyon Landfill is a Class III waste management facility.

2. Wastes disposed of at this waste management facility shall be limited to certain nonhazardous solid wastes and inert solid wastes, as described in Section 20220(a) and Section 20230 of Title 27.

3. Nonhazardous solid waste means all putrescible and nonputrescible solid, semi-solid and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes, and other discarded waste (whether of solid and semi-solid consistency); provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble

pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation to waters of the State (i.e., designated waste).

4. The landfill will accept waste for disposal as deemed acceptable for this class of facility by the Regional Board through Orders or regulations.

### B. Unacceptable Materials

1. No hazardous wastes, designated wastes, or special wastes, such as liquids, oils, waxes, tars, soaps, solvents, or readily water-soluble solids, such as salts, borax, lye, caustic, or acids shall be disposed of at this waste management facility.

2. No semi-solid wastes shall be disposed of at this waste management facility, except as noted above. Semi-solid waste means waste containing less than 50 percent solids, as described in Section 20200 of Title 27.

3. No materials which are of a toxic nature, such as insecticides, poisons, or radioactive materials, shall be disposed of at this waste management facility.

4. No infectious materials or hospital or laboratory wastes, except those authorized for disposal to land by official agencies charged with control of plant, animal, and human disease, shall be disposed of at this waste management facility.

5. No pesticide containers shall be disposed of at this waste management facility, unless they are rendered nonhazardous by triple rinsing. Otherwise, they must be hauled off site to a legal point of disposal.

6. No septic tank or chemical toilet wastes shall be disposed of at this waste management facility.

7. The discharge of wastes or waste byproducts (i.e., leachate or gas condensate) to natural surface drainage courses or to groundwater is prohibited.

### C. Requirements for Disposal Site Operations

1. All Federal, State, and County sanitary health codes, rules, regulations, and ordinances pertinent to the disposal of wastes on land shall be complied with in the operation and maintenance of this waste management facility.

2. Neither the disposal nor handling of wastes at this waste management facility shall create nuisance or pollution, as defined in Section 13050 of the California Water Code.

3. The discharger shall continue to implement a periodic waste load checking program to prevent the disposal of hazardous wastes, designated wastes, or other unacceptable materials.

4. The discharger shall comply with notification procedures contained in Section 13271 of the California Water Code in regards to the discharge of hazardous wastes. The discharger shall remove and relocate to a legal point of disposal, any wastes which are discharged at this site in violation of these requirements. For the purpose of these requirements, a legal point of disposal is defined as one for which waste discharge requirements have been established by a California Regional Water Quality Control Board and is in full compliance therewith. The Regional Board shall be informed within 7 days in writing when relocation of wastes is necessary. The source and final disposition (and location) of the wastes, as well as methods undertaken to prevent future recurrence of such disposal shall also be reported.

5. All wastes shall be covered at least once during each 24-hour period in accordance with Sections 20680 and 20705 of Title 27. Intermediate cover over wastes discharged to this landfill shall be designed and constructed to minimize percolation of precipitation through wastes and contact with material deposited. Other measures will be taken as needed to prevent a condition of nuisance from fly breeding, rodent harborage, and other vector-related activities.

6. Wastes deposited at this site shall be confined thereto, and shall not be permitted to blow, fall, or otherwise migrate off the site, or to enter offsite water drainage ditches or watercourses.

7. Alternative daily cover may be used consistent with Section 20690 of Title 27.

8. The migration of gases from the waste management facility shall be controlled as necessary to prevent water pollution, nuisance, or health hazards.

9. Gas condensate gathered from the gas monitoring and collection system at this waste management facility shall not be returned to the waste management unit. Any proposed modifications or expansions to this system shall be designed to allow the collection, testing and treatment, or disposal by approved methods, of all gas condensate produced at the waste management facility.

10. The discharger shall intercept, remove and dispose of any liquid detected in the LCRS at this waste management facility to a legal point of disposal and leachate shall not be returned to the waste management unit. However, leachate may be used for onsite dust control and/or irrigation if it meets reuse requirements specified in this Order. If determined to be hazardous, collected leachate shall be

transported by a licensed hazardous waste hauler to an approved treatment and disposal facility.

11. In any area within the waste management facility where a natural spring or seep is observed, provisions shall be made, and/or facilities shall be provided, to ensure that this water will not come in contact with decomposable refuse in this facility. The locations of all springs and seeps found prior to, during, or after placement of waste material that could affect this waste management facility shall be reported to the Regional Board.

12. Drainage controls, structures, and facilities shall be designed to divert any precipitation or tributary runoff and prevent ponding and percolation of water at the waste management facility in compliance with Sections 20365 and 21090(b)(1) of Title 27. When necessary, temporary structures shall be installed as needed to comply with this requirement.

13. The waste management facility shall be graded and maintained to promote runoff of precipitation and to prevent ponding of liquids and surface water. Erosion or washout of refuse or cover materials by surface flow shall be controlled to prevent off-site migration.

14. Ponding of liquids over deposited wastes is prohibited.

15. Cut and subgrade slopes, fill slopes, refuse cells, and visual berms shall be designed and excavated/constructed in a manner that will resist settlement and remain stable during the design earthquake event in accordance with Section 20370 of Title 27.

16. No wastewater or stormwater shall leave this site except as permitted by a National Pollutant Discharge Elimination System permit issued in accordance with the Federal Clean Water Act and the California Code of Regulations. The discharger shall maintain and modify, as necessary, a Stormwater Pollution Prevention Plan for this waste management facility.

17. Any abandoned wells or boreholes under the control of the site owner or discharger, and situated within the site boundaries, must be located and properly modified or sealed to prevent mixing of any waters between adjacent water-bearing zones. A notice of intent to decommission a well must be filed with the appropriate regulatory agencies prior to decommissioning. Procedures used to decommission these wells, or to modify wells still in use, must conform to the specifications of the local health department or other appropriate agencies.

18. The Regional Board shall be notified of any incident resulting from site operations that may endanger health or the environment. The notification shall fully describe the incident, including time of occurrence and duration of the incident, a description of the type of, time of, and duration of corrective measures, when correction will be complete (if the endangerment is continual), and the steps taken or planned to reduce or prevent recurrence.

## D. Water Quality Protection Standards

1. Within 90 days after the adoption of this Order, the discharger, in accordance with Section 20390 of Title 27, will begin determination of applicable water quality protection standards (WQPS) for this waste management facility, by:

   a. Performing a minimum of six quarters of groundwater monitoring with intrawell concentration comparisions for all constituents of concern in monitoring wells MW-A, MW-B, MW-C;

   b. Reviewing historic groundwater quality data from abandoned groundwater monitoring well GWM-2a;

   c. Providing an intrawell correlation equation calculated at the 95% confidence interval for each well based on the six-quarter historical data, with a "normal" range of values predicted for the following monitoring periods; and

   d. Determining if the value of the last sampling period is inconsistent with the historical data trend. If so, then there is a tentative indication of a release from the waste management facility.

Point of Compliance

The point of compliance where the WQPS shall apply is a vertical surface located at the hydraulically downgradient limit of the waste management unit that extends through the uppermost aquifer underlying the waste management unit.

Compliance Period

The compliance period is the minimum period of time during which water quality monitoring shall be conducted subsequent to a release from the waste management unit.

| Disposal Units | Active Life | Compliance Period |
|---|---|---|
| Primary Canyon | 1-2 years | 30 years |
| Back-Canyon | 48 years | 78 years |

Monitoring Points

| Monitored Medium | Disposal Units | Background Monitoring Points | Downgradient Monitoring Points |
|---|---|---|---|
| Surface Water | All | Covered under NPDES (stormwater) | Covered under NPDES (stormwater) |
| Vadose Zone | Back-Canyon | None | SPG-A, SPG-B, SPG-C |
| | Primary Canyon | None | V-1,V-2 |
| Groundwater | Back-Canyon | GWM-2a(abandoned in 1998) | MW-A, MW-B, MW-C |
| | Primary Canyon | GWM-2a(abandoned in 1998) | 239-foot well in mouth of Savage Cyn. |

Constituents of Concern and the Concentration Limits

| Parameter | Test Method | Concentration Limits for Monitoring Points (Groundwater and Vadose Zone Monitoring) |
|---|---|---|
| Aluminum (dissolved) | EPA 6010 | TBD (1) |
| Aluminum (total) | EPA 6010 | TBD (1) |
| Antimony (dissolved) | EPA 6010 | TBD (1) |
| Antimony (total) | EPA 6010 | TBD (1) |
| Arsenic (dissolved) | EPA 7060 | TBD (1) |
| Arsenic (total) | EPA 7060 | TBD (1) |
| Barium (dissolved) | EPA 6010 | TBD (1) |
| Barium (total) | EPA 6010 | TBD (1) |
| Beryllium (dissolved) | EPA 6010 | TBD (1) |

| Parameter | Test Method | Concentration Limits for Monitoring Points (Groundwater and Vadose Zone Monitoring) |
|---|---|---|
| Beryllium (total) | EPA 6010 | TBD (1) |
| Bicarbonate (CaCO3) | Std. Method 2320B | TBD(1) |
| Biological Oxygen Demand (BOD) | EPA 405.1 | TBD (1) |
| Boron (dissolved) | EPA 6010 | TBD (1) |
| Boron (total) | EPA 6010 | TBD(1) |
| Cadmium (dissolved) | EPA 6010 | TBD (1) |
| Cadmium (total) | EPA 6010 | TBD (1) |
| Calcium (dissolved) | EPA 6010 | TBD (1) |
| Calcium (total) | EPA 6010 | TBD (1) |
| Carbonate (CaCO3) | Std Method 2320B | TBD (1) |
| Chemical Oxygen Demand (COD) | EPA 410.4 | TBD (1) |
| Chloride | EPA 300.0 | TBD (1) |
| Chromium (dissolved) | EPA 6010 | TBD (1) |
| Chromium (total) | EPA 6010 | TBD (1) |
| Cobalt (dissolved) | EPA 6010 | TBD (1) |
| Cobalt (total) | EPA 6010 | TBD (1) |
| Copper (dissolved) | EPA 6010 | TBD (1) |
| Copper (total) | EPA 6010 | TBD (1) |
| Electrical Conductivity (umhos/cm) | Field | TBD (1) |
| Fluoride | EPA 340.2 | TBD (1) |
| Foaming Agents (MBSA) | EPA 425.1 | TBD (1) |
| Herbicides (ug/L) | EPA 8150 | TBD (1) |
| Hexavalent Chromium (dissolved) | Std M3500 CrO | TBD (1) |
| Hexavalent Chromium (total) | Std M3500 CrO | TBD (1) |
| Hydroxide Alkalinity (CaCO3) | Field, Std. M2320B | TBD (1) |
| Iron (dissolved) | EPA 6010 | TBD (1) |
| Iron (total) | EPA 6010 | TBD (1) |
| Lead (dissolved) | EPA 6010 | TBD (1) |

| Parameter | Test Method | Concentration Limits for Monitoring Points (Groundwater and Vadose Zone Monitoring) |
|---|---|---|
| Lead (total) | EPA 6010 | TBD (1) |
| Magnesium (dissolved) | EPA 6010 | TBD (1) |
| Magnesium (total) | EPA 6010 | TBD (1) |
| Manganese (dissolved) | EPA 6010 | TBD (1) |
| Manganese (total) | EPA 6010 | TBD (1) |
| Mercury (dissolved) | EPA 7470 | TBD (1) |
| Mercury (total) | EPA 7470 | TBD (1) |
| Molybdenum (dissolved) | EPA 6010 | TBD (1) |
| Molybdenum (total) | EPA 6010 | TBD (1) |
| Nickel (dissolved) | EPA 6010 | TBD (1) |
| Nickel (total) | EPA 6010 | TBD (1) |
| Nitrate (as N) | EPA 300.0 | TBD (1) |
| Nitrite | EPA 300.0 | TBD (1) |
| Oil and Grease | EPA 413.2 | TBD (1) |
| Pesticides and PCBs (ug.L) | EPA 3510/8080 | CL (2) |
| pH (std. Unit) | Field | TBD (1) |
| Potassium (dissolved) | EPA 6010 | TBD (1) |
| Potassium (total) | EPA 6010 | TBD (1) |
| Selenium (dissolved) | EPA 7740 | TBD (1) |
| Selenium (total) | EPA 7740 | TBD (1) |
| Semi-volatile Organic Compounds (ug.L) | EPA 3510/8270 | CL (2) |
| Silver (dissolved) | EPA 6010 | TBD (1) |
| Silver (total) | EPA 6010 | TBD (1) |
| Sodium (dissolved) | EPA 6010 | TBD (1) |
| Sodium (total) | EPA 6010 | TBD(1) |
| Strontium (dissolved) | EPA 6010 | TBD (1) |
| Strontium (total) | EPA 6010 | TBD (1) |
| Sulfate | EPA 300.0 | TBD (1) |
| Sulfides | EPA 376.2 | TBD (1) |
| Thallium (dissolved) | EPA 6010 | TBD (1) |
| Thallium (total) | EPA 6010 | TBD (1) |
| Tin (dissolved) | EPA 6010 | TBD (1) |
| Tin (total) | EPA 6010 | TBD (1) |

| Parameter | Test Method | Concentration Limits for Monitoring Points (Groundwater and Vadose Zone Monitoring) |
|---|---|---|
| Total Cyanide | EPA 335.2 | TBD (1) |
| Total Dissolved Solids (TDS) | EPA 160.1 | TBD(1) |
| Total Hardness (as CaCO3) | 2340 | TBD (1) |
| Total Organic Carbon (TOC) | EPA 415.1 | TBD (1) |
| Total Organic Halides (TOX) | EPA 9020 | TBD (1) |
| Total Phenols | EPA 420.1 | TBD (1) |
| Turbidity (NTU) | EPA 180.1 | TBD (1) |
| Vanadium (dissolved) | EPA 6010 | TBD (1) |
| Vanadium (total) | EPA 6010 | TBD (1) |
| Volatile Organic Compounds (ug/L) | EPA 8260 | CL (2) |
| Zinc (dissolved) | EPA 6010 | TBD (1) |
| Zinc (total) | EPA 6010 | TBD(1) |
| | | |

Notes:

(1) TBD = To be determined by intrawell comparisons and prediction intervals.
(2) CL = Concentration limit is the lowest method detection limit (MDL) as specified in the test method.

Constituent of concern and concentration limits for vadose zone monitoring are the same as those prescribed for groundwater monitoring wells.

2. The WQPS may be modified by the Board based on more recent or complete groundwater monitoring data, changes in background water quality, or for any other valid reason.

### E. Provisions for Water Quality Monitoring

1. The discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with Section 13267 of the California Water Code. Failure or refusal to furnish these reports, or falsifying any information provided therein, renders the discharger guilty of a misdemeanor and subject to the penalties stated in Section 13268 of the California Water Code. Monitoring reports shall be submitted in accordance with the specifications contained in the attached Monitoring and Reporting Program, as directed by the Executive Officer.

The attached Monitoring and Reporting Program is subject to periodic revisions, as warranted, and approved by the Executive Officer.

2. The effectiveness of all monitoring wells, monitoring devices, and leachate and gas collection systems shall be maintained for the active life of this site and during the closure and postclosure maintenance periods. If any of the monitoring wells and/or monitoring devices are damaged, destroyed, or abandoned for any reason, the discharger shall provide substitutes acceptable to the Executive Officer to meet the monitoring requirements of the Order.

3. The discharger shall maintain all monitoring wells and/or piezometers in accordance with a "Groundwater Monitoring Well Preventative Maintenance Plan," due to the Regional Board within 60 days of the adoption of this Order. If a well or piezometer is found to be inoperative, the Regional Board and other interested agencies shall be so informed in writing within seven days after such discovery, and this notification shall contain a time schedule for returning the well or piezometer to operating order. The discharger shall provide for the proper handling and disposal of water purged from the monitoring wells during sampling. Water purged from the wells shall not be returned to that well (or any other well). Water purged from the wells may be used for onsite dust control/irrigation provided that it meets the reuse requirements specified in this Order.

4. For any monitoring wells or piezometers installed in the future, the discharger shall submit technical reports for approval by the Executive Officer prior to installation. These technical reports shall be submitted at least 60 days prior to the anticipated date of installation of the wells or piezometers. These reports shall be accompanied by:

   a. Maps and cross sections showing the locations of the monitoring points; and

   b. Drawings and data showing construction details of the monitoring points. These data shall include:

      (i) casing and test hole diameter;
      (ii) casing materials;
      (iii) depth of each hole;
      (iv) the means by which the size and position of perforations shall be determined, or verified, in the field;
      (v) method of joining sections of casing;
      (vi) nature of filter material;
      (vii) depth and composition of seals; and
      (viii) method and length of time of well development.

If a well or piezometer is proposed to replace an inoperative well or piezometer, the discharger shall not delay replacement while waiting for Executive Officer approval. However, the technical report shall be submitted within the required time schedule.

5. The discharger shall conduct required monitoring and response programs in accordance with Section 20385 of Title 27. (A detection monitoring program per Section 20420 of Title 27, an evaluation monitoring program per Section 20425 of Title 27, and a corrective action program per Section 20430 of Title 27.)

6. For each monitoring point described in this Order, the discharger shall monitor quarterly the following monitoring parameters in groundwater, surface water, and the vadose zone, for the detection monitoring program. In determining whether measurably significant evidence of a release from the waste management unit exists, concentration limits of constituents of concern, listed in Provision D of this Order, shall be used for the following monitoring parameters.

| Monitoring Parameters | Test Method |
|---|---|
| **Groundwater** | |
| Bicarbonate (CaCO3) | Std. Method 2320B |
| Boron | EPA 6010 |
| Chemical Oxygen Demand | EPA 410.4 |
| Chloride | EPA 300.0 |
| Electrical Conductivity | Field |
| Nitrate (as N) | EPA 300.0 |
| Nitrite | EPA 300.0 |
| PH | Field |
| Sodium | EPA 6010 |
| Sulfate | EPA 300.0 |
| Total Dissolved Solids | EPA 160.1 |
| Total Hardness (as CaCO3) | Std. Method 2340B |
| Volatile Organic Compounds | EPA 8260 |
| **Vadose Zone** | |
| Bicarbonate (CaCO3) | Std. Method 2320B |
| Boron | EPA 6010 |
| Sodium | EPA 6010 |
| Total Dissolved Solids | EPA 160.1 |
| Volatile Organic Compounds | EPA 8260 |

## F. Provisions for Onsite Use of Water

1. Any water used for landscape irrigation, dust control or other non-emergency uses, shall be subject to waste discharge requirements, except for potable water and any other water allowed by this Order.

2. All use of water shall be within the boundaries of the landfill property. During an emergency, this water may be used for fire fighting on the site or on undeveloped areas off and adjacent to the site.

3. No water shall be routinely applied to the waste management unit except for landscape irrigation water, or for surface dust control. Water used for these purposes shall only be applied by spraying, and shall be applied only on completed lifts, in quantities not to exceed those necessary to reduce immediate dust hazards or support plant life.

4. During periods of precipitation, when the use of extracted wastewater is not necessary for the purpose specified in this Order, the wastewater shall be stored or hauled to a legal point of disposal.

5. Washing of landfill equipment or vehicles shall be confined to areas where the waste water will not percolate into the disposal areas or native soil, or enter the storm water collection system, unless specifically permitted by waste discharge requirements.

6. Water purged from the wells and leachate removed from the site's LCRS intended to be used onsite for dust control and/or irrigation shall at all times be within the range of 6.0 to 9.0 pH units, and shall not exceed the following limits:

| Constituents | Unit | Maximum Limit |
|---|---|---|
| COD | mg/l | 240 |
| Oil and Grease | mg/l | 15 |
| BNA[1] | mg/l | 0.1 |
| Total Heavy Metals[2] | mg/l | 1.5 |
| Purgeable Organics[3] | µg/l | 45.0 |

[1] BNA shall include the summation of concentrations of all base/neutral and acid extractable organic priority pollutant compounds.

[2] Total heavy metals shall include the combined concentrations of the following

metals: arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc.

[3] Purgeable organic compounds shall include the summation of concentrations including purgeable priority pollutants, acetone, and 2-butanone. No individual parameter may exceed 20 percent of the Maximum Limit.

7. Any water used onsite shall not exceed the maximum contaminant levels contained in Title 22, California Code of Regulations, Chapter 15, Article 4, Section 64435 (or subsequent revisions), for heavy metals, nitrates and organic chemicals, and in Section 64473 for copper and zinc. Radioactivity shall not exceed the limits specified in Sections 64441 and 64443 of Title 22 (or subsequent revisions).

### G. Provisions for Containment Structures

1. The waste management facility shall have containment structures which are capable of preventing degradation of the waters of the State. Construction standards for containment structures shall comply with Section 20310, Title 27 requirements. Design specifications are subject to the Executive Officer's review and approval prior to construction of any containment structures.

2. The discharger shall submit detailed preliminary plans, specifications, and descriptions for all proposed containment structures and construction features for Executive Officer approval at least 90 days prior to construction.

3. The preliminary plans shall contain detailed quality assurance/quality control for the proposed construction as required by Section 21710(a)(5), Title 27.

4. Prior to start of construction of any containment structure, a geologic map shall be prepared of the final excavation grade for review, approval, and confirmation in the field by Regional Board staff.

5. No disposal shall occur in a new area until the corresponding construction is completed and certified.

6. The construction report, including drawings documenting "as-built" conditions, shall be submitted within 60 days after the completion of construction. If the "as-built" conditions are virtually identical to the approved preliminary plans and specifications, only change sheets need be submitted in lieu of a complete set of drawings.

7. The discharger shall perform an annual testing for any LCRS to demonstrate their operating efficiency during the compliance period of the waste management units.

### H. Provisions for Reporting Scheduled Activities

1. The discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.

2. In accordance with Section 21710 of Title 27, the discharger shall notify the Regional Board within 7 days, if fluid is detected in a previously dry LCRS, or if a progressive increase in the liquid volume is detected in a LCRS.

3. The discharger shall notify the Regional Board of any material change in the types, quantities, or concentrations of wastes discharged, or site operations and features. The discharger shall notify the Regional Board before any material change is made in accordance with Section 21710 of Title 27.

4. The discharger shall notify the Regional Board in writing of any proposed change of ownership or responsibility for construction, operation, closure, or postclosure maintenance of this waste management facility. This notification shall be given prior to the effective date of the change and shall include a statement by the new discharger that construction, operation, closure, and postclosure maintenance will be in compliance with any existing waste discharge requirements and any revisions.

5. The discharger shall comply with the closure and postclosure maintenance requirements and notification requirements contained in 21769, Title 27. Closure must be in accordance with a Closure Plan and Postclosure Maintenance Plan approved by the Executive Officer, California Integrated Waste Management Board, and local enforcement agency.

6. The discharger shall submit, within 60 days after adoption of this Order, documentation demonstrating compliance with Section 22222 of Title 27, which requires that the discharger provide financial assurance for correcting a known or reasonably foreseeable release from this waste management facility.

### I. General Provisions

1. The discharger shall comply with all other applicable provisions, requirements, and procedures contained in the most recent version of Title 27 and any future amendments.

2. Regional Board staff shall be allowed entry to the waste management facility and to areas where records are kept regarding the waste management facility, at any reasonable time. Staff shall be permitted to inspect any area of the landfill and any monitoring equipment used to demonstrate compliance with the Order. Staff shall be permitted to copy any records, photograph any area, obtain samples, and/or monitor operations to assure compliance with this Order, or as authorized by applicable laws or regulations.

3. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.

4. This Regional Board considers the property owner(s) to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge and from gases and leachate that may be caused by infiltration or precipitation of drainage waters into the waste disposal units or by infiltration of water applied to this facility during subsequent uses of the land for other purposes.

5. These requirements do not exempt the discharger from compliance with any other current or future law which may be applicable. The requirements are not a permit; they do not legalize this waste management facility, and they leave unaffected any further restraints on the disposal of wastes at this waste management facility which may be contained in other statutes.

6. The requirements adopted herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from their liabilities under Federal, State, or local laws.

7. The filing of a request by the discharger for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any condition, provision, or requirements of this Order.

8. This Order does not convey any property rights of any sort, or any exclusive privilege.

9. The discharger must comply with all of the terms, requirements, and conditions of this Order. Any violation of this Order constitutes a violation of the California Water Code, and is grounds for enforcement action, Order termination, Order revocation and reissuance, denial of an application for reissuance, or a combination thereof.

10. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

    a. Violation of any term or condition contained in this Order;

    b. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;

    c. A change in any condition that required either a temporary or permanent reduction or elimination of the authorized waste discharge.

11. According to Section 13263 of the California Water Code, these requirements are subject to periodic review and revision by this Regional Board.

12. Order No. 89-102, adopted on September 25, 1989, and amended by the Subtitle D Superorder 93-062 on September 27, 1993, is hereby rescinded.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on April 13, 2000.

DENNIS A. DICKERSON
Executive Officer

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**
**LOS ANGELES REGION**

**MONITORING AND REPORTING PROGRAM NO. 4469**
**FOR**
**CITY OF WITTIER**
**(Savage Canyon Landfill)**

**(File No. 63-082)**

## I. REPORTING

A. The discharger shall implement this Monitoring and Reporting Program beginning May 1, 2000.

B. The discharger shall submit quarterly waste disposal reports to the Regional Board with the following schedule:

| Quarter | Reporting Date |
|---|---|
| First Quarter (Winter) | April 30 |
| Second Quarter (Spring) | July 31 |
| Third Quarter(Summer) | October 31 |
| Fourth Quarter(Fall/Annual) | January 31 |

C. Quarterly monitoring for the DMP shall be performed with the following schedule:

| Quarter | Sampling Dates | Reporting Date |
|---|---|---|
| First Quarter (Winter) | January 1-January 31 | April 30 |
| Second Quarter (Spring) | April 1-April 30 | July 31 |
| Third Quarter(Summer) | July 1-July 31 | October 31 |
| Fourth Quarter(Fall/Annual) | October 1-October 31 | January 31 |

Quarterly groundwater monitoring reports are to include the deterministic and statistical analyses of groundwater flow, groundwater chemistry, and vadose zone chemistry. In the event monitoring is not performed as above because of unforeseen circumstances, substitute monitoring shall be performed as soon as possible after these times, and the reason for the delay shall also be given.

D. By January 31 of each year, the discharger shall submit an annual report (included with the Fourth Quarter Report) to the Regional Board. The report shall contain both tabular and graphical, time-series plots depicting concentration trends of routine monitoring parameters detected in groundwater and soil-pore gas samples during the previous year. In addition, the discharger shall discuss the compliance record, including the result of annual leachate collection and removal systems performance test.

E. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services Environmental Laboratory Accreditation Program, or approved by the Executive Officer. Laboratory analyses must follow methods approved by the United States Environmental Protection Agency, and the laboratory must meet EPA Quality Assurance/Quality Control criteria.

F. For any analyses performed for which no procedures are specified in the EPA guidelines or in this Monitoring and Reporting Program, the constituent or parameter analyzed, and the method or procedure used, must be specified in the report.

G. The discharger may submit additional data to the Regional Board not required by this program in order to simplify reporting to other regulatory agencies.

H. Analytical data reported as "less than ..." shall be reported as less than a numeric value, or below the limit of detection for that particular analytical method. Also, method detection limit for each monitoring parameter shall be reported.

I. If the discharger performs analyses for any parameter more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the monitoring report.

J. The results of the waste load checking program shall be reported in each quarterly waste disposal report.

K. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

L. The discharger shall retain records of all monitoring information, including all calibration and maintenance records regarding monitoring instrumentation and copies of all data submitted to regulatory agencies for a period of at least five years. This period may be extended by request of the Regional Board at any time, and shall be extended during the course of any unresolved litigation regarding all or any part of the entire waste management facility.

M. This Monitoring and Reporting Program includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachment I). If there is any conflict between provisions stated herein and the "Standard Provisions Applicable to Waste Discharge Requirements", these provisions stated herein will prevail.

N. Records of monitoring information shall include:

1. The date, exact place, procedure, and time of sampling or measurement;
2. The individual(s) who performed the sampling or measurement;
3. The date(s) analyses were performed on the samples;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used;
6. The results of the analyses or measurements, including both statistical and non-statistical analyses;
7. The method detection limits;
8. The executive summary of the key findings;
9. The laboratory QA/QC data and chain of custody records (except for annual reports);
10. The laboratory certification information;
11. The velocity and direction of groundwater flow; and,
12. The measurement of the static water levels of all monitoring wells.

O. In reporting the monitoring data, the discharger shall arrange the data in tabular form.

P. Monitoring reports shall be signed by:

a. In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

b. In the case of a partnership, by a general partner;

c. In the case of a sole proprietorship, by the proprietor;

d. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee..

Q. Each report shall contain the following completed declaration:

"I declare under penalty of perjury that the following is true and correct.

Executed on the _____ day of _____ at _____.

_____ (Signature)

_____(Title)"

## II. WASTE DISPOSAL REPORTING

A. The reports to the Regional Board shall include a map of the site, and shall indicate the area(s) where disposal is taking place or will begin. This map shall be updated quarterly, and summarized and submitted with the annual report due January 31 of each year. If a new area is landfilled, it shall be identified in the corresponding quarterly report.

B. A waste disposal report containing the following information shall be filed with this Regional Board each quarter:

1. A tabular list of the estimated average monthly quantities (in cubic yards or tons) and types of materials deposited each month.

2. An estimate of remaining capacity (in cubic yards and tons), and the remaining life of the site in years and months.

3. A certification that all wastes deposited were deposited in compliance with the Regional Board's requirements, and that no wastes were deposited outside of the boundaries of the waste management facility as specified in the Regional Board's requirements.

4. A description of the location and an estimate of the seepage rate or flow of all known seeps and springs at the site.

5. The estimated amount of water used at the waste management area for landscape irrigation, compaction, dust control, etc., during the month. (If a source other than potable water is used, the sources and amounts of water from each source shall also be reported.)

6. Quantities of liquid pumped from the leachate monitoring sumps and/or extraction wells, including dates of removal, and the ultimate disposition (dust control, returned to landfill, disposal). If no liquid was detected or pumped during the reporting period, a statement to that effect shall be submitted.

7. The discharger shall report all unacceptable (to this site) wastes inadvertently received at this site and their disposition. The following details shall be included:

   a. The source (if known), including the hauler, of the unacceptable wastes and date received and/or discovered.

   b. Identification of waste (if known) and the amount of waste.

   c. The name and address of the hauler who removed the waste from this site

   d. The ultimate point of disposal for the waste.

   e. The discharger's actions to prevent recurrence of the attempted depositing of unacceptable wastes by this source or individual (if applicable). If no unacceptable wastes were received (or discovered) during the month, the report shall so state.

## III. GROUND WATER AND VADOSE ZONE MONITORING

1. Provisions and General Requirements

A. All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

B. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements. or shall ensure that both activities will be conducted.

C. No filtering of samples taken for organics analyses shall be permitted. Samples for organic analyses shall be taken with a sampling method which minimizes volatilization and degradation of potential constituents.

D. Analytical results for ground water monitoring shall be submitted with the corresponding quarterly monitoring report. If a well was not sampled (or measured) during the reporting period, the reason for the omission shall be given. If no fluid was detected in a monitoring well. a statement to that effect (in lieu of analyses) shall be submitted.

E. The discharger shall submit all monitoring data in hard copy form and also on computer diskette (5-1/4 inch, 360 or 1200 kilobytes, or 3-1/2 inch, 1.44 or 2.01 megabyte). The monitoring data submitted on diskette should be in ASCII format, and presented in a cumulative, updated form with each submittal. Monitoring data submitted in hard copy form should be in discrete, noncumulative form.

F. Quarterly observations and measurements of the static water levels shall be made on all monitoring wells, and records of such observations shall be submitted with the quarterly monitoring reports.

G. All monitoring wells shall be sounded each third quarter to determine total depth. Wells affected by pumping shall be measured prior to pumping insofar as is possible.

H. Duplicate samples shall be taken for constituents of concern metals analyses only. Unfiltered samples shall be tested for total metals, and field-filtered samples (.45 with nitric acid; however, care shall be taken that the dissolved metals samples are not exposed to acids until after filtering.

I. Representative water samples shall be obtained from at least the monitoring points listed in Provision D of this Regional Board's Order No. 00-047.

J. The laboratory QA/QC report shall include, at a minimum, method blanks, calibration checks, surrogate recoveries, matrix spikes, and matrix spike duplicates, spiking concentrations, and laboratory quality control samples. Spiking concentration must be no more than 10 times of method detection limit.

K. Practical quantitation limits shall be below the current maximum Contaminant Levels listed in Title 22 of California Code of Regulations or Action Levels recommended by the California Department of Health Services, whenever it is possible.

L. Proper chain of custody procedures shall be used.

M. Constituents detected between the method detection limits and the practical quantitation limits must be reported, but may be reported as a trace.

2. Sampling and Analyses

A. Routine quarterly sampling and analyses of ground water and soil pore liquids for the DMP (for monitoring wells MW-A, MW-B, and MW-C) shall consist of the monitoring parameters listed in Provision E.6 of this Regional Board's Order No. 00-047.

B. Routine sampling and analyses consisting of the constituents of concern listed in Provision D of this Regional Board's Order No. 00-047 shall be completed every five years (starting year 2001), unless required more frequently due to an indication of a release, as described in Title 27, California Code of Regulations, Section 20420.

## IV. STORM WATER MONITORING

A. The discharger shall perform stormwater discharge monitoring consistent with the requirements of Water Quality Order No. 97-03-DWQ (Waste Discharge Requirements for Discharge of Storm Water Associated with Industrial Activities Excluding Construction Activities) adopted by the California State Water Resources Control Board under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001 and Stormwater Pollution Prevention Plan.

## V. MONITORING OF ONSITE USE OF WATER

A. If water purged from the wells and leachate removed from the site's leachate collection and removal systems were used onsite in accordance with Provision F of this Regional Board's Order No. 00-047, the discharger shall analyze constituents listed in Provision F.6 and Provision F.7 of Order No. 00-047 and submit the data in the semi-annual monitoring report.

Ordered By: _____
DENNIS A. DICKERSON
Executive Officer

April 13, 2000